



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **04185130 A**(43) Date of publication of application: **02.07.92**

(51) Int. Cl. **H04J 13/00**  
**H04B 7/08**  
**H04L 1/06**

(21) Application number: **02315556**(71) Applicant: **CLARION CO LTD**(22) Date of filing: **20.11.90**(72) Inventor: **HASHIMOTO TAKESHI**

(54) **DIVERSITY RECEIVER FOR SPREAD SPECTRUM COMMUNICATION** COPYRIGHT: (C)1992,JPO&Japlo

## (57) Abstract:

**PURPOSE:** To reduce the effect of a multi-path and to attain stable transmission reception by providing a 2nd antenna parted spatially with respect to a 1st antenna and taking the signal of the 2nd antenna non-correlation from the signal of the 1st antenna.

**CONSTITUTION:** The receiver consists of antennas 13, 14, filters 15, 16, amplifiers 17, 18, a delay device 19 and a synthesizer 20 or the like. Then the distance between the antennas 13, 14 is spatially parted by  $\lambda/3$  ( $\lambda$  is a wavelength of a carrier) or over so that an SS reception signal  $S_5(t)$  from the antenna 13 and an SS reception signal  $S_6(t)$  from the antenna 14 are almost in non-correlation. Thus, the SS signal received by the antenna 14 reaches an independent reception signal level. For example, a phase difference of a carrier in the correlation spike is  $0^\circ$  (synchronization), the synthesized correlation spike is not almost suppressed. Thus, the effect of the multi-path is reduced and stable transmission reception is attained.

